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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,007	11/29/2001	Tricia Lynn Breen	YOR920010643US1	3871

7590

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EXAMINER

LAM, CATHY FONG FONG

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,007

Applicant(s)

BREEN ET AL

Examiner

Cathy Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 1-24 and 37-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-36 and 52-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Feb. 11, 2002</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election of group III in the reply filed on January 27, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. This application contains claims 1-24, 37-51 are drawn to an invention nonelected without traverse in Paper filed on Jan. 27, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Objections

3. Claim 36 is objected to because of the following informalities: the phrase "electroless plating solution" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 52-56 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Miller (US 3629922).

Miller discloses an article comprised of a plastic substrate with a metal coating. The plastic substrate is pretreated with a phosphorus compound (col 2 L 62-63). Then, the treated surface is contacted with a metal salt or a metal salt complex (col 3 L 3-5).

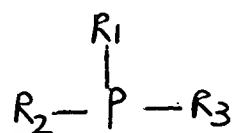
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The examiner is taking the position that the phosphorus compound is equivalent to the claimed ligating chemical agent and the metal salt or metal salt complex is equivalent to the claimed catalytic material.

The treated surface becomes either conductive, such that it is readily electroplatable, or non-conductive such that the catalytic sites render the surface susceptible to further treatment by electroless plating that produces a conductive coating (col 3 L 69-col 4 L 4).

6. Claims 25-27 and 34-35 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Okuhama et al (US 6183545).

Okuhama discloses an aqueous solution for the reductive deposition of metal. The aqueous solution contains a complexing agent such as a hydroxyl alkyl containing phosphine compound (col 2 L 52-56). The phosphine compound forms complexes with noble metals and other metals; the phosphine has the general formula (1):



Wherein R1, R2 & R3 denote lower alkyl groups, at least one of which being hydroxyl or amino-substituted lower alkyl group.

The aqueous solution which contains the phosphine compound is used for electroplating or electroless plating (col 3 L 55-56). The aqueous solution further contains more metals such as tin and/or palladium, and more compounds containing phosphorus (col 3 L 63-col 4 L 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 25-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuhama et al (US 6183545) in view of Miller (US 3629922).

Okuhama teaches an aqueous solution for the reductive deposition of metals.

The phosphine compound meets the structure of claim 27.

The compound may further include metals such as tin and/or palladium and a phosphorus compound.

Okuhama however is silent about the material for the substrate on which the aqueous solution is deposited.

Miller teaches a plastic article which is treated with a phosphorus compound followed by a metal salt or a complex of metal salt treatment. A metal such as nickel is deposited onto the surface treated plastic article (col 4 L 74-75).

The plastic article is made from phenolic resins with hydroxyl groups (col 1 L 55-57).

Miller does not teach the substrate is an inorganic oxide material. Okuhama does not teach the particular ligating chemical agent as in claims 29-31.

In view of applicant's own admission of prior art (on page 16 L 18-20), it is conventional to bind a phosphonic acids to an inorganic oxide surface.

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Furthermore, it would have been obvious to choose a phosphonic acid as a ligating chemical agent for preparing/pretreating the surface because it is within a routine experimentation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (571) 272-1538. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cathy Lam
Primary Examiner
Art Unit 1775

cfl
April 07, 2005